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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/464,161	12/16/1999	SHINICHIRO GOMI	450100-02228	7195

20999 7590 06/28/2005

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EXAMINER	
NGUYEN, KEVIN M	
ART UNIT	PAPER NUMBER
2674	

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/464,161	GOMI ET AL.	
	Examiner	Art Unit	
	Kevin M. Nguyen	2674	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 March 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5 and 9* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5 and 9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *06 August 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This office action is made in response to applicant's amendment filed on March 21, 2005. Claims 6-8 are cancelled, claims 1, 4, 5 and 9 are amended, and claims 1-5 and 9 are currently pending in the application. An action follows below:

2. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-5 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marshall et al (previously cited, US 5,489,923) in view Yamamoto et al (previously cited, US 5,742,279), and further in view of Shaffer et al (newly cited, US 6,050,690).

4. As to claims 1, 4, 5 and 9 (currently revised), Marshall et al teach an image processing apparatus associated with a method, and a computer-readable program medium, the apparatus comprising:

a capture device (14), a first image (22), a projector (17), a second image (21), a screen area (18), a bright point, and a laser pointer (25) (see fig. 2, col. 5, lines 50-54).

Marshall et al teach all of the claimed limitations of claims 1, 4, 5, 9, except for "extraction means for extracting the second image from the first image on the basis of image information captured by said capturing means."

However, Yamamoto et al teach image extraction means 4 for extracting the second image (document No. 1) from the first image (document No. 2, see fig. 1, col. 8, lines 3-10) on the basis of image information captured by said capturing means (camera, col. 11, line 55-57).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to provide Marshal's image processing apparatus including the image extraction means 4 for extracting the second image (document No. 1) from the first image (document No. 2) on the basis of image information captured by said capturing means, in view of the teaching in the Yamamoto et al's reference, because this would allow a user to directly conduct an operation and instructions on the display screen and an input screen as taught by Yamamoto et al (col. 2, lines 18-22).

The combinations of Marshall et al and Yamamoto et al teach all of the claimed limitations of claims 1, 4, 5, 9, except for "a logical product of a first pixel value in a current field and at least one of the following: (i) a second pixel value in one of an immediately preceding field; or (ii) a third pixel value in an immediately subsequent field is obtained, and wherein the bright point is determined to exist only when said first pixel value and either said second pixel value or said third pixel value are on."

Shaffer et al teach a related apparatus comprising a focusing algorithm that is executable by the microprocessor 48 (a logical product, col. 6, lines 16-17) and tracks the number of pixels having values between VH and VL. At least one pixel value P2-P3 is then compared to determine whether it falls within the range VH-VL (fig. 7B, col. 6, line 65 to col. 7, line 1). Thus, detecting the existence of at least one bright point (P2-

P3) by comparing a pixel in a current field with a pixel in either a preceding field (VL) or subsequent field (VH) as claimed.

Therefore, It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Marshall's laser pointer including detecting the existence of at least one bright point (P3) by comparing the pixel in a current field with the pixel in either a preceding field (VL) or subsequent field (VH), in view of the teaching in Shaffer's reference, because this would provide to automatically focus a portion of the displayed image for a viewer as taught by Shaffer et al (col. 2, lines 6-8).

5. As to claim 2 (original), Marshall et al teach position determination means compensates the position of the bright point on the second image (21) to determine the position of the bright point on the first image (22) (see fig. 2).

6. As to claim 3 (original), Marshall et al teach the second image (21) is taken by a flow pick up (14), and blinking-pattern detection means (25), the first image (22) (see fig. 2).

Response to Arguments

7. Applicant's arguments filed March 21, 2005 have been fully considered but they are not persuasive.

8. In response to applicant's argument that claims 1, 4, 5, and 9 recite "a logical product of a first pixel value in a current field and at least one of the following: (i) a second pixel value in one of an immediately preceding field; or (ii) a third pixel value in an immediately subsequent field is obtained, and wherein the bright point is determined

to exist only when said first pixel value and either said second pixel value or said third pixel value are on."

The Examiner is not convinced by Applicant's argument. As stated *supra* with respect to claims 1, 4, 5 and 9 and 19, the Examiner finds that Shaffer et al teach a focusing algorithm that is executable by the microprocessor 48 (a logical product, col. 6, lines 16-17) and tracks the number of pixels having values between VH and VL. At least one pixel value P2-P3 is then compared to determine whether it falls within the range VH-VL (fig. 7B, col. 6, line 65 to col. 7, line 1). Therefore, the Examiner finds that the teaching of Shaffer et al meets of the claimed limitation "detecting the existence of at least one bright point (P2-P3) by comparing a pixel in a current field with a pixel in either a preceding field (VL) or subsequent field (VH)."

For these reasons, the rejections based on Marshall et al, Yamamoto et al, and Shaffer et al have been maintained.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin M. Nguyen whose telephone number is 571-272-7697. The examiner can normally be reached on MON-THU from 8:00-6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick N. Edouard can be reached on 571-272-7603. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the Patent Application Information Retrieval system, see http://portal.uspto.gov/external/portal/pair. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kevin M. Nguyen
Patent Examiner
Art Unit 2674

KMN
June 21, 2005

XIAO WU
PRIMARY EXAMINER